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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,365	11/12/2003	Johannes Becker	BECKER 1	6816
47396	7590	07/31/2009	EXAMINER	
HITT GAINES, PC			DEBNATH, SUMAN	
LSI Corporation			ART UNIT	
PO BOX 832570			PAPER NUMBER	
RICHARDSON, TX 75083			2435	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

### Office Action Summary

**Application No.**

10/706,365

**Applicant(s)**

BECKER, JOHANNES

**Examiner**

SUMAN DEBNATH

**Art Unit**

2435

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-11, 13-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-4, 6-11, 13-18 and 20 are pending in this application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

***Claim Rejections - 35 USC § 103***

3. Claims 1-4, 8-11 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack et al. (Patent No.: US 5,689,516) (hereinafter, "Mack") and further in view of Kalkunte et al. (Patent No.: US 5,515,523) (hereinafter, "Kalkunte") and Bos et al. (Patent No.: US 7,124,340 B1) (hereinafter, "Bos").
4. As to claim 1, Mack teaches for use with an integrated circuit (IC) having a testing port, a system for securing said IC as against subsequent reprogramming, comprising: port inhibit circuitry located on said IC and modifiable to achieve a configuration that determines an extent to which said testing port is enabled (abstract, FIG. 1, col. 3, lines 25-40), said extent selected from the group consisting of: fully enabled, and completely disabled; and port access circuitry, coupled to said testing port, that enables said testing port based on said configuration (FIG.1, col. 3, lines 25-40, col. 6, lines 5-18 and lines 55-65, col. 7, lines 10-25).

Mack is silent on said extent selected from the group consisting of: only partially disabled, said partially disabled extent allowing a direct loopback between input and output pins of said testing port. However, Kalkunte teaches said extent selected from

the group consisting of: only partially disabled (abstract, FIG. 2, col. 6, lines 4-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mach as taught by Kalkunte in order to "maximize efficient use of the memory component and minimized starvation of other memory ports, without requiring higher performance memory components or wider memory bus widths (Kalkunte, col. 2, lines 55-60)."

Neither Mack nor Kalkunte explicitly disclose wherein said testing port comprises a direct loopback between input and output pins thereof. However, Bos discloses wherein the testing port comprises a direct loopback between input and output pins thereof (column 7, lines 60-67 and column 8, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack nor Kalkunte as taught by Bos in order to isolate defects within the circuit by supporting loopback testing.

5. As to claims 8 and 15, these are rejected using the same rationale as for the rejection of claim 1.
6. As to claim 2, Mark teaches wherein said testing port is a Joint Test Action Group (JTAG) port (col. 3, lines 25-40).
7. As to claims 9 and 16, these are rejected using the same rationale as for the rejection of claim 2.

8. As to claim 3, Mark teaches wherein said port inhibit circuitry comprises an inhibit bit in a one-time programmable register (col. 6, lines 5-18).

9. As to claims 10 and 17, these are rejected using the same rationale as for the rejection of claim 3.

10. As to claim 4, Mark teaches wherein said port inhibit circuitry is configured to be permanently modified prior to delivering said IC to a user thereof (col. 6, lines 13-18, col. 7, lines 10-25).

11. As to claim 6, neither Mack nor Kalkunte explicitly disclose wherein said testing port comprises a direct loopback between input and output pins thereof. However, Bos discloses wherein the testing port comprises a direct loopback between input and output pins thereof (column 7, lines 60-67 and column 8, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack nor Kalkunte as taught by Bos in order to isolate defects within the circuit by supporting loopback testing.

12. As to claim 13, it is rejected using the same rationale as for the rejection of claim 6.

13. As to claims 11 and 18, these are rejected using the same rationale as for the rejection of claim 4.

14. Claims 7, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack and further in view of Kalkunte, Bos and Hansford (Patent No.: US 6,522,100 B2).

15. As to claim 7, neither Mack nor Kalkunte and Bos explicitly disclose wherein said IC is a baseband chip of a mobile communication device. However, Hansford discloses wherein the IC is a baseband chip of a mobile communication device (column 1, lines 45-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack, Kalkunte and Bos as taught by Hansford in order to receive a frequency signal or frequency information.

16. As to claims 14 and 20, these are rejected using the same rationale as for the rejection of claim 7.

17. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures

may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

### ***Response to Arguments***

18. Applicant's arguments filed May 11th have been fully considered but they are not persuasive.

19. Applicant argues that: "[t]he Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Mack and Kalkunte as taught by Bos in order to isolate defects with the circuit by supporting loopback testing. (See Examiner's Action of February 10, 2009, pages 3-4.) The Applicant contends that it would not have been obvious to modify the teaching of Kalkunte as taught by Bos as doing so would change the principle of operation of Kalkunte."

In response to applicant's argument that "it would not have been obvious to modify the teaching of Kalkunte as taught by Bos as doing so would change the principle of operation of Kalkunte", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references

would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Bos discloses wherein the testing port comprises a direct loopback between input and output pins thereof (column 7, lines 60-67 and column 8, lines 1-10).

20. Applicant argues that: "[t]he cited portions of Kalkunte teach partially disabling a first bus interface while a second bus interface can access a memory array. Modifying this cited portion of Kalkunte with the direct loopback teachings of Bos would change the principle of operation of Kalkunte because looping back would not allow the first bus interface to be disabled and, thus, not allowing the other bus interfaces to have free access to the memory array."

In response to the Applicant's argument, it would be noted that Bos is a secondary reference which should not be considered as whole. Bos's reference discloses a direct loopback of input and output pins and this teaching of Bos are taken to modify the teaching of Kalkunte in order to isolate defects within the circuit by supporting loopback testing. Thus, Kalkunte's teaching of partially disabling memory will still work.

### ***Conclusion***

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUMAN DEBNATH whose telephone number is (571)270-1256. The examiner can normally be reached on 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. D./  
Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435